PMBOK® 7e Update for *CPM 4e* Chapter 1 Introduction to Project Management

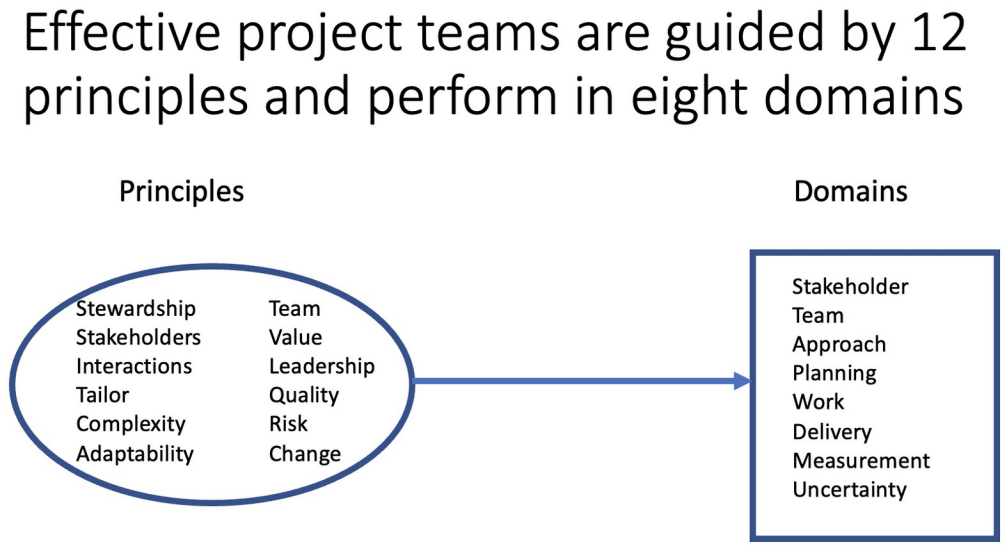
About every four- or five-years PMI updates their *Standard for Project Management* and their *Guide to the Project Management Body of Knowledge (PMBOK® Guide)*.

These 2021 documents vary dramatically from those of 2017. The previous ones were very prescriptive, describing specific processes by their inputs and outputs. Those processes were grouped in the *Standard for Project Management* in process groups of initiating, planning, executing, monitoring and controlling, and closing. Those same processes were grouped in the *PMBOK® Guide* in eight knowledge areas of managing integration, scope, schedule, cost, quality, resource, communication, risk, and stakeholder.

The *Standard for Project Management* is the officially recognized document approved by the American National Standards Institute (ANSI). The new version describes twelve principles that provide broad guidance for understanding project management.

The *PMBOK® Guide 7e* (the 2021 document) operationalizes those principles by describing eight performance domains that more directly give guidance demonstrating how to plan and manage projects. It also includes a section on tailoring projects that provides more guidance.

The seventh edition of these documents was released in July 2021. In this introductory chapter, we will define briefly the twelve principles from the *Standard for Project Management* along with the eight performance domains and tailoring section from the *PMBOK® Guide*. Since the *PMBOK® Guide* is meant to help apply the principles from the Standard, in the remainder of this textbook, we will focus our coverage on the *PMBOK® Guide*. A visual of the two documents is below.



One final note is that the new version of both documents specifically states that everything in the old documents is still valid. For that reason, we will continue to use the flowcharts depicting the old *PMBOK® Guide* and *Standard*, but we will point out in each chapter the impact the new *PMBOK® Guide 7e* has.

Standard for Project Management ANSI/PMI 99-001-2021

The first major section describes a system for value delivery. This states that projects are to create value for stakeholders. This is amplified later, but the idea here is merely creating deliverables is not enough. The purpose of projects is to create value by helping to solve problems and achieve desired outcomes.

The remaining portion of the standard describes the twelve principles that provide general guidance for behavior on projects. They do not provide detailed, specific direction. The twelve principles are aligned with the *PMI Codes of Ethics and Professional Responsibility* that stresses responsibility, respect, fairness, and honesty. No principle violates another, but they may overlap.

The twelve principles from section 3 are:

3.1 Be a diligent, respectful, and caring steward displaying integrity, care, trustworthiness, and compliance.

3.2 Create a collaborative project team environment by means of team agreements, organizational structures, processes, authority, accountability, and responsibility.

3.3 Effectively engage with stakeholders using a proactive, two-way engagement to improve project results and satisfaction.

3.4 Focus on value as understood by a successful outcome, solution to a need, or satisfaction of a business case. Value can be assessed in terms of worth, alignment, or delivering functionality and quality within risk and resource levels.

3.5 Recognize, evaluate, and respond to system interactions in a holistic and dynamic manner, integrating parts to create cumulative capabilities. Harness a diverse team for a common objective.

3.6 Demonstrate leadership behaviors by creating a desired environment and leading with vision. Use personal character, influence, motivation, role modelling, transparency, and multiple leadership styles to continuously

improve. Foster shared responsibility and recognize that all people can display leadership.

3.7 Tailor your delivery approach based on context using just enough process, adapt to stakeholders, objectives, team, and environment.

3.8 Build quality into process and deliverables using both conformance to acceptance criteria and fitness for use. Improve quality of deliverables and processes, maximize the probability of desired outcome with little waste, focus on detection and prevention.

3.9 Navigate complexity whether it comes from human behavior, system behavior, ambiguity, uncertainty, interactions, or technological innovation. Project teams may modify activities to address complexity impacts.

3.10 Optimize risk responses. Risk can be positive or negative, risk appetite is the degree an organization is willing to accept, while the risk threshold is a measure. Responses should be timely, cost effective, realistic, agreed to, and owned.

3.11 Embrace adaptability and resiliency. Be adaptable to changing conditions, resilient to setbacks or failure, and focus on outcomes. Use change control, short feedback loops, continuous learning, transparent and engaged planning, test ideas and approaches, and defer decision making.

3.12 Enable change to achieve the envisioned future state. Continually evaluate benefits to stakeholders and engage them, enable users and others, use motivational strategy rather than force, consider speed of change, and reinforce change after implementation.

PMBOK® Guide 7e

1.0 Introduction

The introduction makes clear three major changes to the *PMBOK® Guide*. First, the focus is on delivering successful outcomes, not merely creating agreed-upon deliverables. This encourages project managers and teams to use a relationship approach rather than a transaction approach to their clients. Second, the structure describes project performance domains which are groups of critical, related, even overlapping activities that are needed on all projects throughout their life. Third, tailoring is the thoughtful adaptation of approach, governance, and processes that should be considered on all projects.

2.0 Project Performance Domains

2.1. Stakeholder Performance Domain

Desired outcomes include productive working relationship, agreement on objectives, supportive and satisfied stakeholders, and ensuring that opposition does not negatively impact the project. To achieve these desired outcomes: create alignment and engagement; ID, understand, analyze, prioritize, and engage stakeholders; and monitor their feelings, emotions, beliefs, and values.

2.2. Team Performance Domain

Desired outcomes include shared ownership, a high-performing team, leadership by all.
To achieve these outcomes: determine the appropriate amount of centralized or distributed management and leadership, facilitation, and servant leadership. Develop the project team by defining vision, objectives, roles, team operations, growth, transparency, integrity, and respect. Use a range of leadership skills, appropriate to the situation.

2.3. Development Approach and Life Cycle Performance Domain

Desired outcomes include the development approach, life cycle, and phases to deliver value. To achieve these outcomes choose a predictive, hybrid (iterative or incremental), or adaptive development approach based upon the desired product, service, or result; project; and organization. Phases should have exit criteria. If primary risk is from regulations use a predictive approach, but if primary risk is from stakeholder acceptance use an adaptive approach.

2.4. Planning Performance Domain

Desired outcomes include the project progresses as planned, a holistic approach is used, evolving information is elaborated, an appropriate amount of planning is used, stakeholder expectations are met, and there is a process to adapt. To achieve these outcomes iterative or incremental projects use epics, features, stories, and backlogs while predictive projects use
estimating, scheduling, fast-tracking, and crashing, dependencies, leads, lags, and budgets.

2.5. Project Work Performance Domain

Desired outcomes include efficient and effective performance and appropriate processes to manage stakeholder engagement, physical resources, procurement, change, and improvement. To achieve these outcomes, establish and tailor processes; use audits to make them efficient and effective; balance constraints and team and project needs; monitor and integrate new work, changes, and risk; and capture and share both explicit and tacit knowledge.

2.6. Delivery Performance Domain

Desired outcomes include projects contributing to business objectives, realizing intended outcomes and benefits at an appropriate time frame, team having a clear understanding of requirements, stakeholders accepting and being satisfied with deliverables. To achieve these outcomes, define business value and determine where and how it can be measured; decompose scope; assure completion of deliverables; use quality costs; and monitor moving targets.

2.7. Measurement Performance Domain

Desired outcomes include a reliable understanding of project status, actionable data for decision-making, actions to keep performance on track, achieving targets and generating business value. To achieve these outcomes, use leading and lagging indicators. Metric types include deliverable, delivery, baseline performance, resources, business value, stakeholders, and forecast metrics. Adaptive projects also use throughput, dashboards, information radiators, and visual controls. Metrics should have thresholds beyond which corrective action is taken.

2.8. Uncertainty Performance Domain

Desired outcomes include environmental awareness, proactive responses to uncertainty, awareness of interdependencies, ability to anticipate risks, delivery with little negative impact, realized opportunities, and reserves used wisely. To achieve these outcomes, consider and manage uncertainty, ambiguity, complexity, volatility, and risk. Gather information, prepare for multiple outcomes, investigate alternative designs, and build-in resilience. Deal with complexity by decoupling, simulating, viewing from diverse perspectives, balancing data used, iterating, engaging, and building in redundancy. Deal with threats (negative risk) by avoidance, escalation, transfer, mitigation, or acceptance. Deal with opportunity (positive risk) by exploiting, escalating, sharing, enhancing, or accepting.

3.0 Tailoring

While the larger part of *PMBOK® Guide 7e* describes performance domains, one other key section describes tailoring. A project team should first select the developmental approach they wish to use and then tailor it for both the organization and project. Then the team should implement ongoing improvement. Tailoring can include a mix of agile and predictive approaches. Process tailoring includes adding, modifying, removing, blending, and aligning.

Engagement tailoring includes people, empowerment, and integration. Tools, methods, and artifacts can also be tailored. Tailoring should consider

deliverables to be produced, project team, and culture. Each performance domain can be tailored.

4.0 Models, Methods, and Artifacts (MMA)

4.1 Overview – This section demonstrates much of the "how to" of project management and may be a useful reference.

A model is a thinking strategy.

A method is a means.

An artifact is a template, document, output, or deliverable (an output).

Avoid using any MMA that is duplicative, not useful, or misleading.

4.2 Commonly used models

Categories include situational leadership, communication, motivation, change, complexity, team development, conflict, negotiation, planning, process groups, and salience.

4.3 Mapping models to performance domains

4.4 Commonly use methods

Categories include data gathering and analysis, estimating, meetings and events, prioritization, and other.

4.5 Mapping methods to performance domains

4.6 Commonly used artifacts

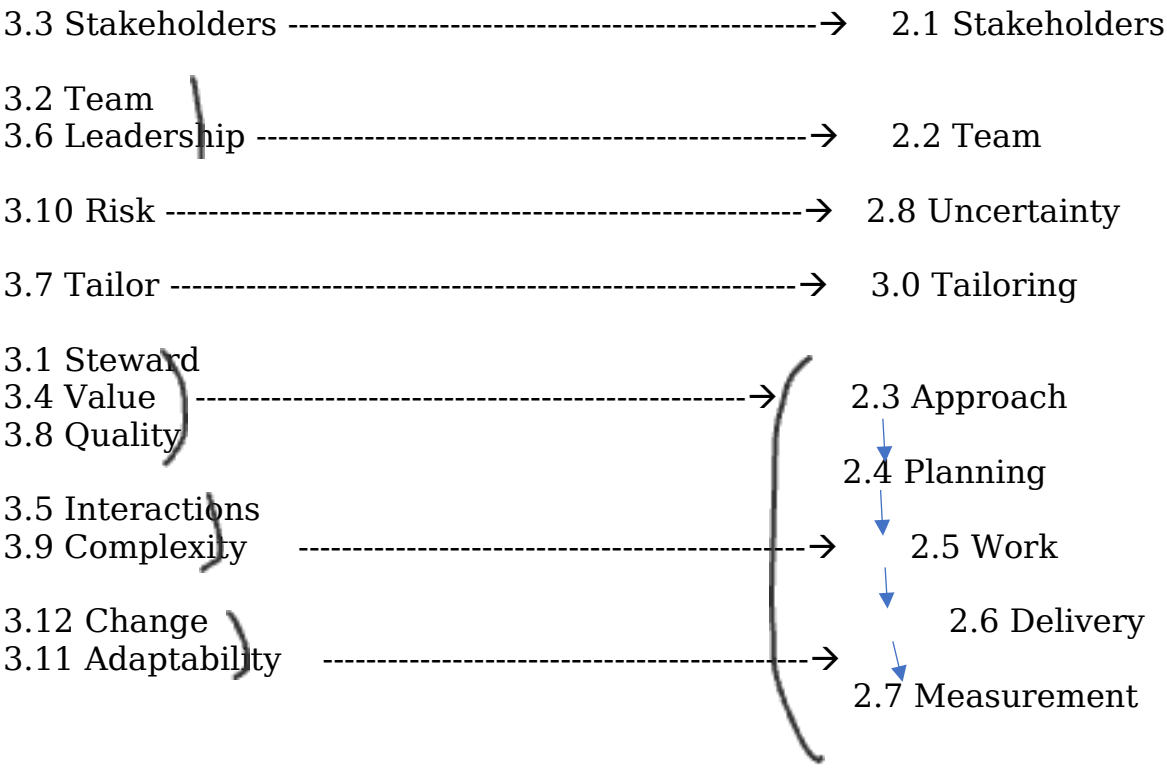
Categories include strategy, logs and registers, plans, hierarchy charts, baselines, visual data and information, reports, agreements and contracts, activity lists, bid documents, metrics, project calendar, requirements documents, project team charter, and user stories.

4.7 Mapping artifacts to performance domains

While there is not one single, easy way to exactly map the new *Standard for Project Management* and *PMBOK® Guide*, an approximate approach is shown below. Stakeholders, risk, and tailoring match very well. Team and leadership principles map to the team performance domain. A few of the other principles seem to cluster in related groups. Stewardship, value, and quality can form one cluster. Interactions and complexity form a second cluster. Change and adaptability form a third cluster. On the *PMBOK® Guide*, the five domains of approach, planning, work, delivery, and measurement are all closely related with one generally flowing into the next. All three clusters of principles from the *Standard for Project Management* are partially operationalized by all five of the related domains. The visual below shows these relationships.

Standard for Project Management 7e ***PMBOK® Guide***

Principle Domains (plus Tailoring)


3.3 Stakeholders
2.1 Stakeholders
3.2 Team
3.6 Leadership
2.2 Team
3.10 Risk
2.8 Uncertainty
3.7 Tailor
3.0 Tailoring
3.1 Steward
3.4 Value
3.8 Quality
2.3 Approach
2.4 Planning
3.5 Interactions
3.9 Complexity
2.5 Work
2.6 Delivery
3.12 Change
3.11 Adaptability
2.7 Measurement